

G. CORRECTIONS TO SOUNDINGS

G1. Velocity Correctors

Velocity correction data were collected periodically throughout the survey area. The first cast compared the MARTEK CTD and the DIGIBAR Sound Velocity Probe. The data collected were extremely close. The DIGIBAR was chosen for future use because of its simpler operation. All data was processed using the program VELOCITY. The computed velocity correctors were entered into the HDAPS sound velocity table and applied on-line to the echosounder depths.

On 21st July a sound velocity cast was made using the MARTEK CTD. The data collected verified the data in velocity table 4 and data collection continued using this table.

The following casts were made:

DATE	LAT/LONG	TYPE	HDAPS VELOCITY TABLES
19 April [✓]	30° 03.1' [✓] / 88° 32.0' [✓]	MARTEK CTD [✓]	N/A [✓]
— 19 April [✓]	30° 03.1' [✓] / 88° 32.0' [✓]	DIGIBAR [✓]	1 [✓]
— 22 June [✓]	30° 04.2' [✓] / 88° 32.2' [✓]	DIGIBAR [✓]	4 [✓]
21 July [✓]	30° 10.5' [✓] / 88° 33.9' [✓]	MARTEK CTD [✓]	N/A. [✓]

See APPENDIX I, for listings of cast data and output from the VELOCITY program. A copy of the instrument calibrations and HDAPS Velocity Tables are also included in APPENDIX I.✕

All hydrographic and diver determined depths have been corrected with predicted tides. Correctors for time and height were taken from the project instructions.

Tidal correctors were applied on-line using the HDAPS predicted tides table. The tables used can be found in APPENDIX I.*

On 22 May, 1989 the Point Cadet Tide Gauge was struck by a local research vessel. This caused the gauge and floatwell to rotate 180° and settle a fraction of a foot. The staff and the gauge itself were undamaged and data was still collected. On 26 May, 1989 the gauge was repositioned and the tide staff was releveled. This leveling shows the staff did not move. No least depths were taken between the dates 22-26 May, therefore smooth tides data is not required for this time period.

On 3 and 5 August, the paper in the tide gauge was torn. One least depth was taken on AWOIS No. 7064 during this time period. The least depth was remeasured on 9 August after the tide gauge was returned to working order.

A request for smooth tides was mailed 21 August, 1989. A copy is included in Appendix I.*